

# References

→ When are refs the most useful?

↳ return more than one result

```

e.g. void fill_with_result(int& a, int& b, int& c, int input){
    // calculations
    a = ...
    b = ...
    c = ...
}
    
```

→ will "return" these 3 values as result such that they can be used in the main function e.g.

↳ avoid copying very large objects

e.g. calling a function with vectors / arrays etc

↳ cannot copy objects if they are only once

```

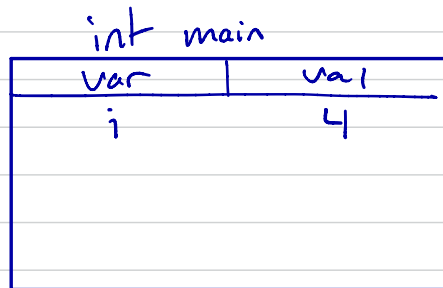
e.g. void print_func(std::ostream out){
    out << "blabla";
}
    
```

code examples from lesson:

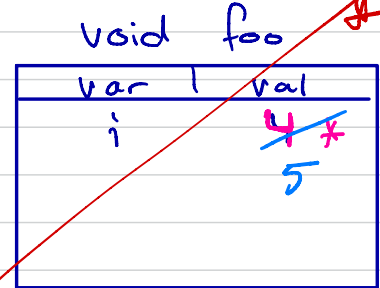
```

void foo(int i) {
    i = 5;
}

int main() {
    int i = 4;
    foo(i);
    std::cout << i << std::endl;
}
    
```



↳ i still 4

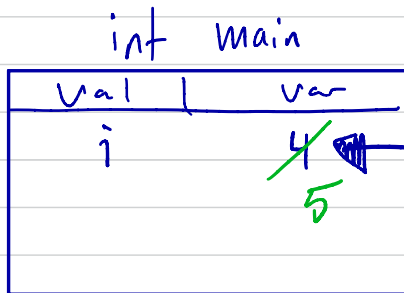


right when foo is called i is passed as 4

```

void foo(int& i) {
    i = 5;
}

int main() {
    int i = 4;
    foo(i);
    std::cout << i << std::endl;
}
    
```



→ output i: 5

